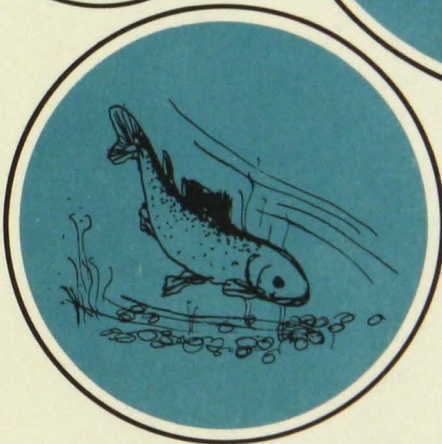
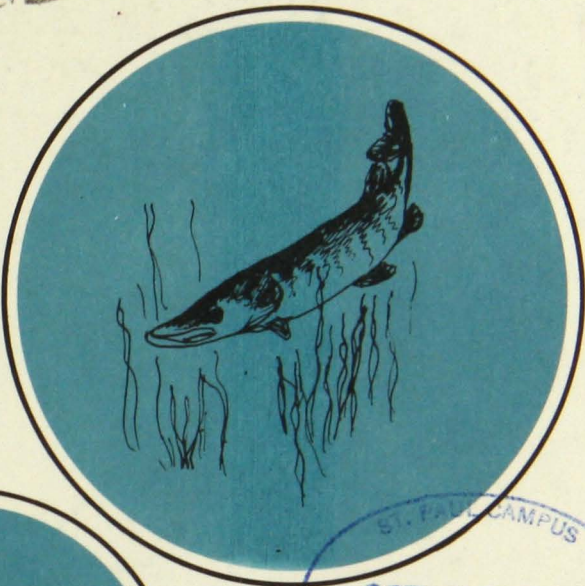


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*Fresh  
Water  
Fish—  
Care and Cooking*

*Verna Mikesh and Grace Brill*

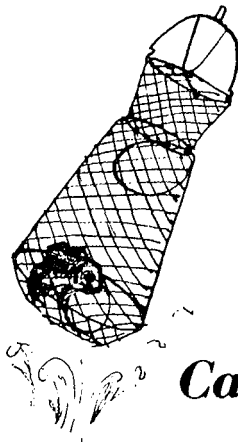
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## ***Fresh Water Fish— Care and Cooking***

*I have laid aside business and gone a-fishing.*

Izaak Walton

Keep the fish you catch alive as long as possible. A metal link bag will allow them to live in the water. A stringer is less desirable, as most fish stay alive on it only a short time. Remember that the putrifying bacteria present on every fish multiply rapidly on a dead fish held in warm surface water. A dead fish held for an hour in water 70° to 80° F. will taste fishy. Good fresh fish do not smell or taste fishy.

Don't toss fish in the bottom of the boat; they will dry out and become contaminated with dirt and slime. An ice chest one-quarter full of crushed ice is ideal for storing or transporting your catch.

The sooner you clean and refrigerate or freeze a freshly caught fish, the better. If you don't have the time or facilities for thorough cleaning, remove the gills and entrails, wash the surface, and place the fish on ice. Don't be disturbed by the yellow cysts often found around the fins or in the flesh of freshly caught fish. They are harmless once the fish has been cooked.

### ***Tips for Winter Caught Fish***

Keep fresh winter caught fish covered so the wind doesn't dry them out. Drying causes objectionable flavors and makes scaling difficult.

You can freeze whole winter caught fish just as they come out of the water. Wrap them in good quality material such as freezer weight aluminum foil or saran-type film to prevent them from drying out.

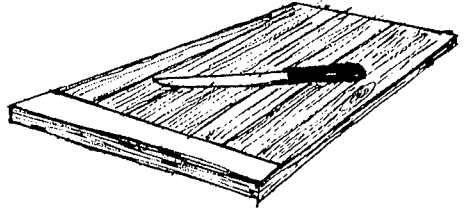
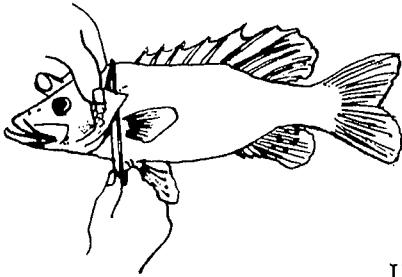
Thaw them in cold water and clean them as you would freshly caught fish.

# *Cleaning Fish*

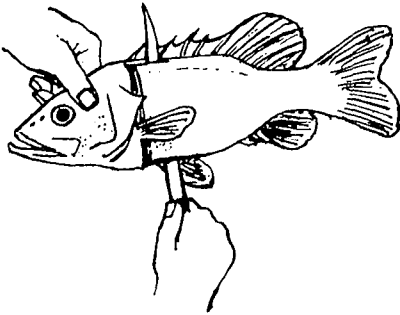
## *Filleting*

Either pronunciation of this word (fil'-et or fil-lay') is correct. A fillet is a piece of fish cut along the length of the fish parallel to the backbone. A steak is a piece of fish cut across the backbone.

Large fish such as bass, walleye, and northernns can be filleted. Though small, perch often are filleted because they are difficult to scale. Follow these steps.

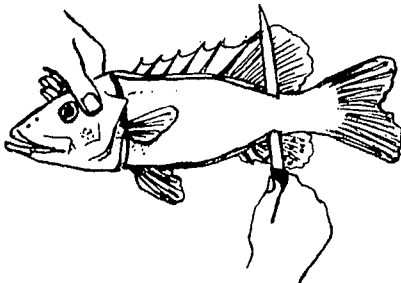


Use a clean board and a knife with a thin, straight-edged blade.

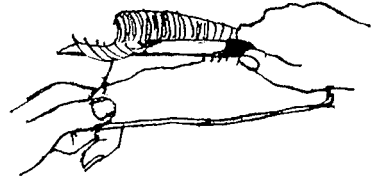
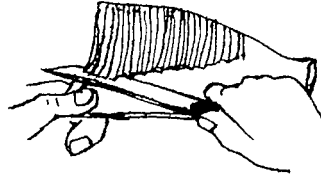
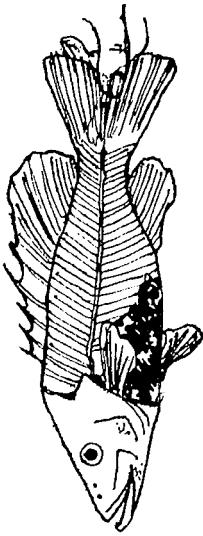


Make a vertical cut in the head just behind the paired fins. Cut as deep as the backbone but not through it.

With the knife blade flat and using a sawing motion, cut toward the tail. Cut along but not through the backbone.

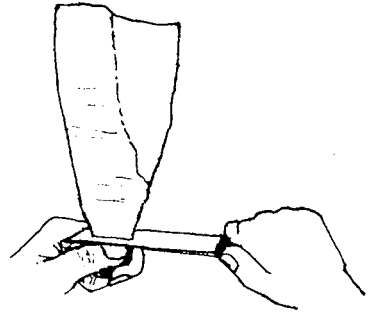


Continue cutting until you come out at the tail.

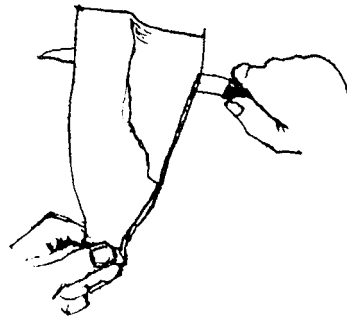


Turn the fish over and repeat the last three steps. Throw away the backbone, head, fins, and intestines all intact.

Remove the ribs from the fillet. Carefully start the blade just under the top of the ribs. Flatten the blade, exerting upward pressure on the ribs.

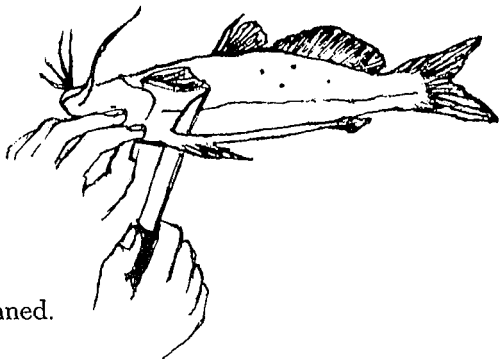


To remove the skin, place the fillet skin side down. Make a cut until you reach the skin. Turn the blade nearly flat, grasp the skin, and pull slowly while working the knife with a slight sawing motion.

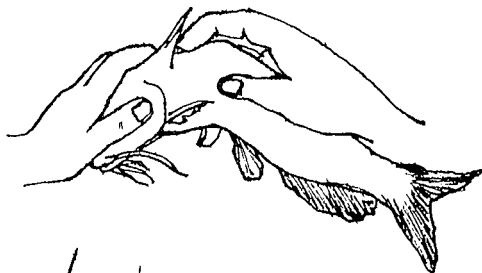


## *Skinning*

Bullheads and catfish should be skinned. Here is one way to do it.

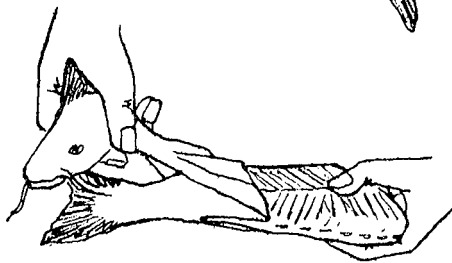


Hold the fish with the head toward you. Start cutting behind the fatty fin. Cut forward to the head and then down to the backbone.



Bend the head down to break the backbone. Insert your forefinger over the end of the backbone into the rib cage and hold it.

With your other hand, pull the head backward and peel off the skin. The entrails will come free with the head. Cut off the tail fin.



## *Scaling*

Small panfish, such as crappies or sunfish, or large fish left whole for baking are cleaned by scaling and gutting. Some people prefer to fillet panfish, but too much flesh is wasted in this method.

To remove scales, use a blunt knife, the edge of a heavy spoon, or a fish scaler. Use a table fork for easy scaling of sunfish. Hold the implement almost at a right angle to the fish. Scrape from the tail to the head. Scales come off most easily when fish are wet.

Slit the entire length of the belly and scrape out the entrails and blood along the backbone.

Remove the fins by cutting into the flesh along each side of the fin. Grasp the fin and give it a slow steady pull toward the head. Cut off the head and tail or leave them on if you prefer. Wash the fish in cold water; don't allow it to soak. Leave small fish whole. Cook, refrigerate, or freeze them immediately.

## ***Fleecing***

The scales on buffalo fish and carp are removed by fleecing. Insert a knife beneath the scales with the blade flat against the fish's side. Use a sawing motion and remove the scales along with the outer layer of skin. Leave the inner white skin intact to hold the fish together during baking.

## ***Cleaning Trout and Smelt***

You may wish to leave the heads and fins on trout and smelt intact, but many people prefer to remove them. A toothbrush is useful for removing the fine scales on smelt. Or you can remove them by stroking the fish with your thumb and forefinger. Snip off the heads with kitchen shears. Trout do not require scaling. Simply remove the entrails and wash them in cold water.

To bone smelt, first remove the head and entrails. Place the smelt belly down on a board or chopping block. Using the palm of your hand, press down hard on the back of the fish until it is flat like a butterfly shrimp. Turn the fish belly up, take hold of the head end of the backbone, and lift out the bones.

## ***Fish Preparation Tips***

*Practice Cleanliness.* If you clean fish on thick newspapers, the mess will be easy to clean up. If you use a cleaning table or board, be sure to keep the area free from fish slime. Putrifying bacteria thrive on fish slime, so wash these surfaces thoroughly to insure good tasting fish.

*Use Salt.* Dipping your fingers in salt will enable you to hold a slippery fish as you clean it. Also rub salt into the cleaning board to remove all traces of fish slime.

To remove fish odors from your hands, rub them with salt and then wash them with soap. Remove fish odors from cooking utensils by soaking them in a strong hot solution of salt and water.

*Storing Fresh Fish.* Wrap fresh fish in moistureproof paper or put it in a tightly covered dish and store it in the coldest part of the refrigerator. Hold fish at 40° F. or below.

*Freezing Fish.* Clean and freeze fish soon after catching it. Prepare the fish as you would for table use. Cut large fish into fillets, steaks, or chunks. Leave small fish whole.

Fish dries out and develops off-flavors unless it is properly packaged. Wrap it in heavy duty aluminum foil or saran-type film. Polyethylene bags do not offer enough protection from oxygen. Separate layers of fish with two thicknesses of packaging material to facilitate thawing. If you desire, overwrap the package to help prevent punctures.

You can freeze small fish such as smelt and panfish in a block of ice. Place the fish in a pan, coffee can, or any clean, watertight container. Cover the fish with ice water and place the container in the freezer. Thaw the ice under a slow stream of cold water.

Large fillets, whole fish, or chunks can be protected with an ice glaze. Place unwrapped fish in the freezer until it is frozen hard. Dip the fish into a pan of ice water and put it back in the freezer immediately. Repeat this process three or four times. Wrap the glazed fish in heavy aluminum foil or saran-type film to prevent ice evaporation and chipping.

Store fish in the coldest part of the freezer. A temperature of 0° F. is essential, but a -10° F. temperature is better.

Thaw fish in the refrigerator in the original wrap. Cook it as soon as it has defrosted.

The storage life of fish packaged in good quality materials held at 0° F. or lower is:

Northern pike, lake trout, and smelt .....	4-6 months
Bluegills, bass, crappies, and sunfish .....	7-9 months
Walleyes and yellow perch .....	9 months or more

Storing fish at -10° F. or in a block of ice will increase its storage life by 1 or 2 months.



## ***Food Value of Fish***

Fish, like meat, furnishes protein, fat, minerals, and vitamins—nutrients we need for body growth and maintenance. The fat content of fish varies, depending on the species and the season.

## ***Cooking Fish***

Cooking fish is easy. In fact, overcooking fish is more common than undercooking it. Cook fish until it flakes easily when tested with a fork. Then you'll have moist fish with a fine flavor.

Fat fish such as carp, whitefish, and lake and brook trout should be baked, poached, steamed, or panfried with little additional fat. Lean fish such as bass, perch, walleyed pike, crappies, and sunfish usually are panfried or broiled with additional fat. You may also bake it, using additional fat.

## ***What To Serve with Fish***

Enhance the flavor of fish by serving it with a tossed green salad and a sharp or tart dressing. Serve green vegetables such as asparagus, broccoli, spinach, or peas to add color to the meal. Complete your menu with creamed, baked, or au gratin potatoes.

Garnishes help make a dish more appealing by adding color or crispness. Try these garnishes with fish.

*Beets—cooked whole or sliced*  
*Carrots—tops, sticks, curls, or shredded*  
*Celery—tops, hearts, sticks, or curls*  
*Cucumbers—slices or sticks*  
*Green peppers—sticks or rings*  
*Hardcooked eggs—slices, wedges, or grated yolks*  
*Lemons—slices or wedges*  
*Lettuce—leaves or shredded*  
*Paprika—sprinkled sparingly*  
*Parsley—sprigs or chopped*  
*Pickles—whole, sliced, or chopped*  
*Radishes—whole or sliced*  
*Tomatoes—slices or wedges*  
*Watercress—sprigs or chopped*

# *Recipes*

## **Fried Fish (6 servings)**

<i>2 pounds fillets or steaks</i>	<i>½ teaspoon pepper</i>
<i>or 3 pounds pandressed fish</i>	<i>1½ cups dry bread</i>
<i>¼ cup milk</i>	<i>or cracker crumbs</i>
<i>1 egg, beaten</i>	<i>Fat for frying</i>
<i>1 teaspoon salt</i>	

Combine milk, egg, salt, and pepper. Dip fish in the liquid mixture and roll it in the crumbs. Heat about ½ inch of fat in the bottom of a 10-inch heavy frypan. Add the fish and fry it slowly at moderate heat. When the fish is golden brown on one side, turn it carefully. Fry the fish until it is brown and flakes easily when tested with a fork. Cooking will take 8-15 minutes, depending on thickness. If desired, drain the fish on absorbent paper. Serve it plain or with a sauce.

*Variation:* Sprinkle the fish with salt and pepper. Then roll it in 1 cup of cornmeal or flour instead of the egg and crumb mixture.

## **Oven Fried Fish Fillets (6 servings)**

<i>2 pounds fish fillets</i>	<i>1 cup fine bread crumbs</i>
<i>2 teaspoons salt</i>	<i>4 tablespoons butter</i>
<i>1 cup milk</i>	

Cut fillets into serving portions. Add the salt to the milk. Dip the fish in the milk and roll it in the crumbs. Place fish in a well greased shallow baking pan. Pour melted butter over the fish. Place the pan on a shelf near the top of a very hot oven (500° F.) and bake it 10-15 minutes or until the fish is brown and flakes easily when tested with a fork. Serve it immediately on a hot platter, plain or with a sauce.

*Variation:* Use dressed smelt instead of fish fillets.

### **Quick Baked Smelt ( 4 servings )**

<i>1 teaspoon salt</i>	<i>½ cup milk</i>
<i>¼ teaspoon pepper</i>	<i>1½ pounds dressed smelt</i>
<i>½ teaspoon dry mustard</i>	<i>2½ cups crushed cereal flakes</i>
<i>1½ teaspoons Worcestershire sauce</i>	<i>3 tablespoons melted butter</i>

Combine salt, pepper, mustard, Worcestershire sauce, and milk. Dip the smelt, one at a time, first into the milk mixture and then into the crushed cereal. Arrange the fish on a large shallow greased baking pan in one layer. Sprinkle the melted butter over them evenly and bake them in a 450° F. oven for 15-20 minutes. Serve the smelt with your favorite sauce or with lemon wedges.

### **Broiled Fish ( 6 servings )**

<i>2 pounds fish fillets or steaks</i>	<i>1 teaspoon salt</i>
<i>2 tablespoons melted butter</i>	<i>½ teaspoon paprika</i>
<i>2 tablespoons lemon juice</i>	<i>½ teaspoon pepper</i>

Place the fish (skin side down for fillets) in a well greased baking pan. Combine the remaining ingredients and mix well. Pour the sauce over the fish. Broil the fish about 4 inches from the heat for 10-15 minutes or until the fish flakes easily when tested with a fork. Baste the fish with the pan sauce at least once during broiling.

*Variation:* Use pandressed fish instead of fillets or steaks. Turn them after 5-8 minutes. Baste and broil them 5-8 minutes more or until the fish flakes easily when tested with a fork.

### **Baked Stuffed Fish ( 6 servings )**

<i>A 3- or 4-pound whole fish, cleaned</i>	<i>Bread stuffing</i>
<i>Salt and pepper to taste</i>	<i>2 tablespoons melted butter or 4 strips of bacon</i>

Dry the fish. Sprinkle it inside with salt and pepper. Place it on a well greased bake-and-serve platter or baking pan. Stuff the fish loosely with bread stuffing. Brush it with melted butter or cover it with strips of bacon held in place with toothpicks. Bake the fish in a moderate oven (350° F.) for 45-60 minutes or until the fish flakes easily when tested with a fork.

### **Bread Stuffing**

<i>¼ cup butter</i>	<i>¼ teaspoon thyme</i>
<i>¼ cup chopped onion</i>	<i>½ teaspoon sage</i>
<i>½ cup chopped celery</i>	<i>1 teaspoon salt</i>
<i>1 egg, beaten (optional)</i>	<i>½ teaspoon pepper</i>
<i>4 cups dry bread crumbs</i>	

Melt the butter in a skillet. Then saute the onion and celery in it until they are tender. Add the cooked vegetables, beaten egg, and seasonings to the bread crumbs and mix thoroughly. If the dressing seems dry, add 2 tablespoons of water.

### **Baked Fillets In Sour Cream (6 servings)**

<i>Thin lemon slices</i>	<i>Pepper</i>
<i>2 pounds fish fillets</i>	<i>1 cup sour cream</i>
<i>Salt</i>	<i>Paprika</i>

Cover the bottom of a shallow baking dish with lemon slices. Arrange the fillets on top. Season them to taste with salt and pepper. Cover and bake the fish 30 minutes in a moderate oven (350°-375° F.) or until it flakes easily with a fork. Uncover the fish and add the combined sour cream and ½ teaspoon salt. Sprinkle paprika over the top. Brown the cream slightly under the broiler unit.

*Variation:* Omit the lemon and add 1 tablespoon of minced onion and ½ teaspoon of prepared mustard to the sour cream.

### **Fish In A Foil Package**

Place fish fillets on greased aluminum foil. Top each one with green pepper and onion slices and salt and pepper them. Dot them with butter. Wrap the fish snugly in the foil. Place the packages on the grill, about 3-4 inches above the hot coals. Turn the packages occasionally with tongs. Grill the fish 30-45 minutes, depending on thickness. Serve it in the foil.



### Charcoal Broiled Fish

Pandressed fish, fillets, and steaks can be charcoal broiled. If possible, use a well greased, long handled, hinged wire grill. Brush the fish with a sauce containing a fat such as lemon butter or with plain oil or butter before and while cooking it. To keep the fish moist, broil bacon with it.

#### Lemon Butter

<i>4 tablespoons butter</i>	<i>1 tablespoon minced</i>
<i>1 tablespoon lemon juice</i>	<i>parsley (optional)</i>

Melt the butter and add the lemon juice and parsley to it.

#### Tartar Sauce

<i>1 cup mayonnaise or salad dressing</i>	<i>1 tablespoon minced pickles</i>
<i>1 tablespoon minced parsley</i>	<i>1 tablespoon minced onions</i>
<i>1 tablespoon minced capers (optional)</i>	<i>or chives</i>

Combine all the ingredients and mix well. Serve the sauce with broiled, oven fried, or fried fish.

#### Quick Tartar Sauce

<i>½ cup mayonnaise or salad dressing</i>	<i>¼ cup drained sweet pickle relish</i>
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Combine the two ingredients and mix well.

### Fish Cakes ( 16 cakes )

<i>Enough raw fillets to make</i>	<i>½ teaspoon pepper</i>
<i>3 cups or 1½ pounds of</i>	<i>2 eggs</i>
<i>ground fish</i>	<i>1-2 cups milk</i>
<i>1 medium onion</i>	<i>Butter or oil for frying</i>
<i>1½ teaspoons salt</i>	
<i>1 teaspoon nutmeg</i>	

Put the fillets through the fine blade of a meat grinder four times. Clean the grinder between times to remove the fish bones. Add the onion in the last grinding. Add the salt, nutmeg, pepper, and eggs and beat well. Add ½ cup milk and beat the mixture. Gradually add the remaining milk until the mixture is as heavy as a batter for drop cookies. The mixture will thicken as you beat it. The amount of milk required varies with the kind of fish. Dry fish such as northerns will take up more milk than fatty ones such as buffalo fish.

With a tablespoon, drop the batter in hot butter or oil or some of each. You'll need about ¼ inch of fat. Flatten the cakes a little and turn them when they're brown. They should be firm and white inside when done.

You can freeze this batter. Place it in a closely covered container and use it within 2 months. You can shape the batter into fish cakes before freezing, but they tend to be watery when thawed.



Verna Mikesh and Grace Brill are associate professors and extension nutritionists, University of Minnesota.

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